CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: White Slough Water Pollution Control Facility Master Plan and Grant Application

MEETING DATE: June 17, 1998

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council authorize staff to seek statements of qualifications from consultants for development of a long-range master plan for treatment of wastewater at the City's White Slough Water Pollution Control Facility, and authorize submittal of a grant application to the CALFED Bay-Delta Program.

BACKGROUND INFORMATION: The City's wastewater treatment facility, located west of I-5, presently discharges secondary treated effluent to the Delta during winter months and irrigates adjacent City-owned farmland during summer months. The facility operates under a 5-year permit from the State Regional Water Quality Control Board (RWQCB). Our permit has expired and is in the process of being renewed.

Staff has met with representatives of the Board and we are very concerned that our present practices will no longer be permitted. While the permit process is one of negotiation and possible compromise, the issues will not go away and will certainly be revisited in the next or a subsequent permit cycle. Thus, staff feels the City should proceed to develop a long-term solution to the City's wastewater treatment and disposal process. In addition to determining what methods will meet long-term treatment requirements, the study of possible solutions should examine alternatives that do not require discharge to the Delta.

In making permit requirements, Board staff relies on the Basin Plan for our area that was adopted by the State during the term of our last permit. There are two significant statements in the Plan that drive our recommendation. They are:

- "Beneficial uses do not include all of the reasonable uses of water. For example, disposal of wastewaters is not included as a beneficial use. This is not to say that disposal of wastewaters is a prohibited use of waters of the state; it is merely a use which cannot be satisfied to the detriment of beneficial uses." (See Exhibit A for full text.)
- "The Regional Board encourages the disposal of wastewaters on land where practicable, and requires applicants for waste discharge requirements and discharge permits to evaluate land disposal as an alternative." (See Exhibit B.)

The City has an opportunity, under the CALFED Bay-Delta Ecosystem Restoration Program, to possibly obtain funding for study of using constructed wetlands to meet these requirements. This is the same program which is funding the Mokelumne River Project being led by Woodbridge Irrigation District with City participation. The deadline for applications is July 2, 1998, and staff is working with a consultant to submit an application.

FUNDING: None needed at this time; however, the master plan study is likely to cost $150,000, or more, and will come from the Wastewater Utility Enterprise Fund. Staff will be making additional presentations on this issue prior to requesting these funds.

Richard C. Prima, Jr.
Public Works Director

Attachments
cc: Assistant Wastewater Treatment Superintendent - Del Kerlin

APPROVED: _____
H. Dixon Flynn -- City Manager

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II. PRESENT AND POTENTIAL BENEFICIAL USES

Beneficial uses are critical to water quality management in California. State law defines beneficial uses of California's waters that may be protected against quality degradation to include (and not be limited to) "...domestic; municipal; agricultural and industrial supply; power generation; recreation; esthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves."[3/] Protection and enhancement of present and potential beneficial uses are primary goals of water quality planning.

Significant points concerning the concept of beneficial uses are:

1. All water quality problems can be stated in terms of whether there is water of sufficient quantity or quality to protect or enhance beneficial uses.

2. Beneficial uses do not include all of the reasonable uses of water. For example, disposal of wastewaters is not included as a beneficial use. This is not to say that disposal of wastewaters is a prohibited use of waters of the state; it is merely a use which cannot be satisfied to the detriment of beneficial uses. Similarly, the use of water for the dilution of salts is not a beneficial use although it may, in some cases, be a reasonable and desirable use of water.

3. The protection and enhancement of beneficial uses require that certain quality and quantity objectives be met for surface and ground waters.

4. Fish, plants, and other wildlife, as well as humans, use water beneficially.

Existing and potential beneficial uses which currently apply to surface and ground waters of the basins are presented in Figures and Tables II-1 and II-2. NOTE: Water Bodies within the basins that do not have beneficial uses designated in Tables II-1 and II-2 are assigned MUN designations in accordance with the provisions of State Water Resources Control Board Resolution No. 88-63 (Appendix Item 8) which is, by reference, a part of this Basin Plan. These MUN designations in no way affect the presence or absence of other beneficial use designations in these water bodies.

Beneficial use designation (and water quality objectives, see Chapter III) must be reviewed at least once during each three-year period for the purpose of modification as appropriate.[4/]

The beneficial uses, and abbreviations, listed below are standard basin plan designations.

Municipal and Domestic Supply (MUN) - includes usual uses in community or military water systems and domestic uses from individual water supply systems.

Agricultural Supply (AGR) - includes crop, orchard, and pasture irrigation, stock watering, support of vegetation for range grazing, and all uses in support of farming and ranching operations.

Industrial Service Supply (IND) - includes uses which do not depend primarily on water quality such as mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, and oil-well repressurization.

Industrial Process Supply (PROC) - includes process water supply and all uses related to the manufacturing of products.

Ground Water Recharge (GWR) - includes natural or artificial recharge for future extraction for beneficial uses and to maintain salt balance or halt saltwater intrusion into freshwater aquifers.

Freshwater Replenishment (FRSH) - provides a source of fresh water for replenishment of inland lakes and streams of varying salinities.

Navigation (NAV) - includes commercial and naval shipping.

Hydroelectric Power Generation (POW) - is that supply used for hydropower generation.

Water-Contact Recreation (REC 1) - includes all recreational uses involving actual body contact with water, such as swimming, wading, waterskiing, surfing, sport fishing, uses in therapeutic spas, and

other uses where ingestion of water is reasonably possible.

Nonwater-Contact Recreation (REC 2) - covers recreational uses which involve the presence of water but do not require contact with water, such as picnicking, sunbathing, hiking, beachcombing, camping, pleasure boating, tidepool and marine life study, hunting and aesthetic enjoyment in conjunction with the above activities as well as sightseeing.

Warm Freshwater Habitat (WARM) - provides a warm water habitat to sustain aquatic resources associated with a warm water environment.

Cold Freshwater Habitat (COLD) - provides a cold water habitat to sustain aquatic resources associated with a cold water environment.

Wildlife Habitat (WILD) - provides a water supply and vegetative habitat for the maintenance of wildlife.

Preservation of Rare and Endangered Species (RARE) -provides an aquatic habitat necessary, at least in part, for the survival of certain species established as being rare and endangered species.

Fish Migration (MIGR) - provides a migration route and temporary aquatic environment for anadromous or other fish species.

Fish Spawning (SPWN) - provides a high-quality aquatic habitat especially suitable for fish spawning.

issue WDRs for State timber operations.[12/] However, CDF and the Regional and State Boards must still ensure that the operations incorporate BMPs and comply with applicable water quality standards. Appendix F of the MAA also calls for the preparation of a Memorandum of Understanding (*MOU*) for the Regional Boards, the State Board, and the CDFFP to prescribe interagency procedures for implementing BMPs. The MAA is Appendix Item 11.

3. Department of Conservation Agreement

In March 1988, the State Board amended a February 1982 MOA with the State Department of Conservation, Division of Oil and Gas (*CDOG*), to regulate oil, gas, and geothermal fields' discharges. The agreement requires CDOG to notify the Regional Boards of all new operators, all pollution problems associated with operators, and proposed discharges. CDOG and Regional Boards must also work together, within certain time-lines, to review and prepare discharge permits. It is Appendix Item 12.

Control Action Considerations of the Central Valley Regional Water Quality Control Board

Policies and Plans

1. Urban Runoff Policy

   a. Subregional municipal and industrial plans are required to assess the impact of urban runoff on receiving water quality and consider abatement measures if a problem exists.

   b. Effluent limitations for storm water runoff are to be included in NPDES permits where it results in water quality problems.

2. Disposal of Wastewater on Land Policy

The Regional Board encourages the disposal of wastewaters on land where practicable, and requires applicants for waste discharge requirements and discharge permits to evaluate land disposal as an alternative. Where studies show that year-round land disposal is not practicable, the Regional Board will require dischargers to evaluate dry season land disposal as an alternative.

3. Controllable Factors Policy

Controllable water quality factors are not allowed to cause further degradation of water quality in instances where other factors have already resulted in exceedence of the water quality objectives. Controllable water quality factors are those actions, conditions, or circumstances resulting from human activities that may influence the quality of the waters of the State, that are subject to the authority of the State Board or Regional Board, and that may be reasonably controlled.

4. The Water Quality Limited Segment Policy

Additional treatment beyond minimum federal requirements will be imposed on dischargers to Water Quality Limited Segments. Dischargers will be assigned or allocated a maximum allowable load of critical pollutants so that water quality objectives can be met in the segment.

5. San Joaquin River Agricultural Subsurface Drainage Policy

   a. The control of toxic trace elements in agriculture subsurface drainage, especially selenium, is the first priority.

   b. Of the two major options for disposal of salts produced by agricultural irrigation, export out of the basin has less potential for environmental impacts and, therefore, is the favored option. The San Joaquin River may continue to be used to remove salts from the basin so long as water quality objectives are met.

   c. The valleywide drain to carry the salts generated by agricultural irrigation out of the valley remains the best technical solution to the water quality problems of the San Joaquin River and Tulare Lake Basin.

      The Regional Board, at this time, feels that a valleywide drain will be the only feasible, long-range solution for achieving a salt balance in the Central Valley. The Regional